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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,478	11/25/2003	Shigeru Ichihara	117845	9123
25944 7590 08/19/2008 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850				
EXAMINER				
EVANS, JEFFERSON A				
ART UNIT		PAPER NUMBER		
2627				
MAIL DATE		DELIVERY MODE		
08/19/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/720,478

**Applicant(s)**

ICHIHARA ET AL.

**Examiner**

Jefferson Evans

**Art Unit**

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8 is/are rejected.
- 7) ☐ Claim(s) 7 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/5508)  
Paper No(s)/Mail Date \_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: \_\_\_\_.

Claims 1 to 9 are pending.

***Oath/Declaration***

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because it does not identify the citizenship of each inventor, specifically the citizenship of Akihiro Oda is not indicated.

***Specification***

2. The abstract of the disclosure is objected to because the 2<sup>nd</sup> line thereof is awkward and should be rewritten as, for example – When a length of a front end portion of a magnetic pole part layer, which specifies a recording track width of a recording medium, is set as D, and a width of an upper edge of a magnetic pole end surface, positioned on a medium outflow side, is set as W, a dimensional ratio D/W of the length D to the width W is set so as to lie within the range of  $0 < D/W \leq 2.3$ . –

3. The title of the invention is not adequately descriptive. A new title is required that is more clearly indicative of the invention to which the claims are directed by indicating that the invention is drawn to the dimensions of a magnetic pole part that faces a medium.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Ohtomo et al (U.S. 7,142,392). Ohtomo discloses a length  $L_y$  of a front end portion of a magnetic pole part layer, which specifies a recording track width of a recording medium, and a width  $T_w$  of an upper edge of a magnetic pole end surface, positioned on a medium outflow side, wherein a dimensional ratio of the length  $L_y$  to the width  $T_w$  is  $0.8/0.35$  which equals 2.29 which is within the claimed range of  $0 < D/W \leq 2.3$ .

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 to 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohtomo et al.

**As per Claims 2 and 3**

Ohtomo discloses that his trackwidth specifying part may be formed from a CoNiFe film having a saturation magnetic flux density  $B_s = 2.0T$  but does not appear to specify the coercive force thereof.

Official Notice is given that it was notoriously old and well known in the art at the time the invention was made to have a thin film magnetic head trackwidth specifying part be formed of a material with a coercive force meeting the claim limitation in question.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the trackwidth specifying part of Ohtomo be formed of a material having a coercive force of  $5.0 \times 10^3 / (4\pi)$  A/m or less, or  $10.0 \times 10^3 / (4\pi)$  A/m or less. The motivation would have been: CoNiFe was a material known to have comparable values in thin film magnetic head applications and the coercive force values recognized in the art as appropriate for materials established as advantageous for forming thin film magnetic head trackwidth specifying parts includes values of  $5.0 \times 10^3 / (4\pi)$  A/m or less, or  $10.0 \times 10^3 / (4\pi)$  A/m or less.

As per Claims 4 and 5

Ohtomo discloses that the width Tw may be 0.35 microns whereas the claims set forth the width as being 0.3 microns.

Official Notice is given that it was notoriously old and well known in the art at the time the invention was made to have a trackwidth be 0.3 microns or less.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the trackwidth of Ohtomo be 0.3 microns or less. The motivation would have been: the disclosure of 0.35 microns by Ohtomo would be suggestive of adjacent values also, particularly lower values in view of the consistent and continued drive in the disk drive art towards higher and higher information densities.

***Claim Rejections - 35 USC § 112***

8. Claims 2, 4, 6, and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 enlarges the claimed range for the ratio from  $0 < D/W \leq 2.3$  to  $0 < D/W \leq 2.8$  which runs counter to the fact a dependent claim would normally narrow a claim limitation rather than broaden a claim limitation. This creates confusion as to what applicant actually intends to claim for the limitation.

***Allowable Subject Matter***

9. Claims 7 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 6 and 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jefferson Evans whose telephone number is 571-272-7574. The examiner can normally be reached on weekdays, noon to 7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Thi Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jefferson Evans/  
Primary Examiner, Art Unit 2627  
August 15, 2008